

UNIVERSITY STUDY PLAN

Valid starting with 2025–2026

Mathematics Informatics

Program Type: Bachelor's Degree

Language of Instruction: Romanian

Fundamental Field: Mathematics and Natural Sciences

Field of University Studies: Mathematics

Enrolling Faculty: Faculty of Sciences

Coordinating Department: Department of Mathematics and Computer Science

Program Coordinator: Lecturer PhD Andreea Solomon

Duration of Studies: 3 years

Number of ECTS Credits: 180 + 4 **Form of Education:** Full-time (FT)

Rector: Dean: Department Director:

Prof.PhD Habil. Sorin Radu Assoc. Prof. PhD Florin Sofonea Prof. PhD Mugur Acu

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Universitatea "Lucian Blaga" din Sibiu Facultatea de Științe

Mission of the Study Program

The fundamental mission of this study program is to cultivate an applied mindset while developing both the theoretical and practical reasoning skills of its students. It aims to prepare specialists in the field of *Mathematics* who are capable of meeting the requirements of a modern education system, as well as those of a flexible, computerized, and technology-driven economy and industry.

The program provides solid training for professionals in Mathematics who can use computer-based tools in accordance with current market needs, employing the methods and instruments specific to the *Mathematics and Computer Science* specialization.

Graduates will be able to quickly integrate into lower secondary education, work effectively in teams of programmer analysts, statisticians, or mathematicians, and be qualified to work in economic, financial, tourism, or industrial sectors.

Objectives of the Study Program

- To facilitate the acquisition of specialized knowledge through an operational system that ensures professional, cognitive, and affective-value competencies.
- To strengthen the foundation of specialized knowledge and to develop an interdisciplinary and integrative perspective in order to prepare competent professionals.
- To train highly qualified specialists in *Mathematics and Computer Science* who meet current professional standards and societal needs.
- To ensure an optimal study environment and the efficient two-way transfer of knowledge between the academic and practical fields.
- To continuously adapt the study programs to the real needs of society by adopting flexible curricula in line with modern requirements for lifelong professional training.
- To participate in local, national, and international scientific research programs that address both fundamental and applied topics in Mathematics and Computer Science.
- To support scientific, administrative, cultural, and economic institutions through research themes that help improve their activity, image, and efficiency.
- To capitalize on the results of scientific research through contracts and specialized publications, both nationally and internationally.
- To encourage and support the continuous professional development of specialists and researchers through participation in postgraduate, master's, and doctoral studies, as well as documentation and exchange programs with similar institutions at home and abroad.
- To involve, within the educational process, practitioners with recognized competence and experience in the fields of Mathematics and Computer Science.



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Premises and Deliverables of the Study Program

The study program has been active since 1990, based on the official authorization No. 7751/1990 issued by the Ministry of Education and Science (Government Decision 225/05.03.1990). In 1995, it received provisional authorization to operate, according to Government Decision No. 568/1995, and in 2000 it was fully accredited under Government Decision 410/2002, published in the Official Gazette No. 313/2002.

The program continues at the master's level through the **Applied Mathematics and Computer Science** master's degree, offering graduates of the first cycle the opportunity to continue their studies in the same field.

Within the field of Mathematics, there is also the possibility to pursue doctoral studies at "Lucian Blaga" University of Sibiu (ULBS).

The competencies developed by graduates of this study program qualify them for the following occupations, as listed in the Diploma Supplement and registered in the Romanian Classification of Occupations (RNCIS – COR/ISCO-08/ESCO):

- 2120 Mathematicians, Actuaries, and Statisticians
 - 212009 Mathematician
 - 212001 Mathematics Consultant
 - 212004 Mathematics Specialist
 - 212011 Statistical Consultant
 - 212014 Statistics Specialist
- 2330.1.11 Secondary Education Mathematics Teacher
- 2514.2 ICT Applications Developer

Graduate Profile

Graduates of this program are highly qualified specialists capable of conducting scientific research and pursuing continuous professional development in the field of Mathematics. The study program ensures the formation of cognitive, professional (instrumental), and affective-value (interpersonal) competencies, in accordance with both national and international academic standards.

Admission Requirements and Progression Conditions

Admission to the *Mathematics and Computer Science* bachelor's degree program is based exclusively on the applicant's academic performance, without any form of discrimination. Registration for the admission competition is allowed only on the basis of a **high school diploma (baccalaureate)** or an equivalent qualification.

Ministerul Educației



Universitatea "Lucian Blaga" din Sibiu Facultatea de Științe

The admission grade, calculated to two decimal points (without rounding), is determined as follows:

• 100% – the average grade of the baccalaureate examination.

Enrollment in the following academic year is conditional upon fulfilling the promotion criteria specified in the *Regulations on the Professional Activity of Students*.

Equal Opportunity Policy

Recruitment, admission, transfer, and student mobility within the *Mathematics and Computer Science* program are conducted transparently, in full compliance with current legislation and the procedures approved by the ULBS Senate.

Admission is based solely on the candidate's academic competencies, with no discriminatory criteria applied.

Program Sustainability

From the perspective of ecological sustainability, the *Mathematics and Computer Science* study program promotes the efficient use of resources through the following measures:

- Organizing study groups in ways that minimize energy consumption associated with teaching activities while maintaining high-quality professional training.
- Encouraging the use of electronic formats for assignments, reports, and projects.
- Using electronic learning materials whenever possible.

The need for specialists in Mathematics who can meet the demands of a modern, flexible, and digitalized education system, economy, and industry is evident in the current social and economic context.

The demand for professionals in Mathematics capable of using computational tools in accordance with market requirements and with methods specific to this specialization is continuously increasing.

Graduates of this program will be able to quickly integrate into secondary education, join teams of programmer-analysts, statisticians, and mathematicians, and work in economic, financial, tourism, or industrial institutions.

Professional training through the *Mathematics and Computer Science* bachelor's program therefore meets the needs of society and contributes to the sustainable development of the social and economic environment.